

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

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(72)Inventor : KUYAMA KOJI

YOSHIDA SHIGERU

FUKUOKA KIMIMICHI

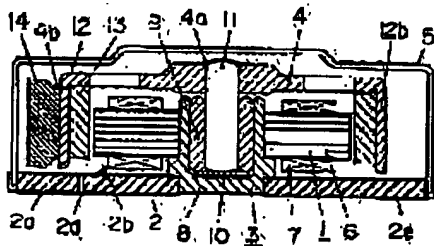
UMEHARA MIKIO

(54) FLAT VIBRATION MOTOR

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a vibration motor featuring a small size, lightness in weight, low electric power consumption, maximum vibration and thin type flat structure as the vibration motor to be used for portable apparatus and to use this motor for embodiment of the thin, lightweight and long-term usable portable apparatus.

SOLUTION: A rotor 4 has a magnet 13 and a cylindrical part 12b. The magnet 13 faces the outer periphery of a stator core 6 apart a spacing. The cylindrical part 12b encloses the outer periphery of the magnet 13 approximately over the entire periphery thereof. An unbalance weight 14 is disposed on the outer periphery of the cylindrical part 12b. The unbalance weight 14 is fixed by laser welding to the outer side of the cylindrical part 12b. The unbalance weight 14 is formed of an alloy



containing tungsten and copper.

LEGAL STATUS

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LIST D

DEPOLARIZER FOR LITHIUM NEGATIVE ELECTRODE BATTERY, AND LITHIUM BATTERY

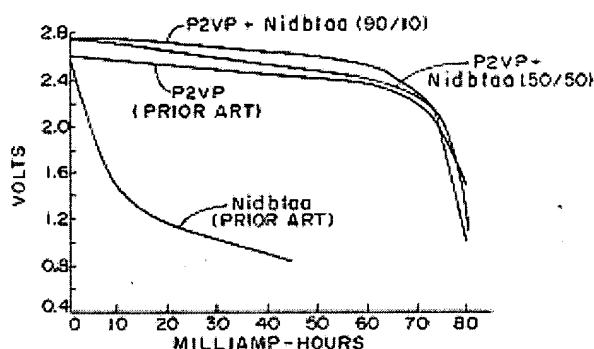
Patent number: JP4137463
 Publication date: 1992-05-12
 Inventor: WICELINSKI STEVEN P
 Applicant: MINE SAFETY APPLIANCES CO
 Classification:
 - international: H01M4/60; H01M4/06
 - european:
 Application number: JP19900417077 19901229
 Priority number(s):

Also published as:

EP0438741 (A1)
 US4952469 (A1)

Abstract of JP4137463

PURPOSE: To provide a battery with a high performance by employing depolarizer containing particulated polyvinylpyridine with a specific atomic weight and a specific amount of bivalent metal, dibenzotetra-aza-neurene.
CONSTITUTION: Depolarizer comprises pelletized or fused mixture of iodine, polyvinylpyridine, suitably poly-2-vinylpyridine and bivalent metal, dibenzotetra-aza-neurene (Mdbtaa). The atomic weight of the polyvinylpyridine is suitably 30,000-400,000. In a suitable manufacturing method, the iodine and the polymer are mixed with the Mdbtaa in the amount of about 1% by weight - 50% by weight of the polymer. Thereby, a battery with remarkably large current characteristics in comparison with conventional batteries can be provided.



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